

COMMUNICATIONS BUS WITH REDUNDANT SIGNAL PATHS  
AND METHOD FOR COMPENSATING FOR SIGNAL PATH  
ERRORS IN A COMMUNICATIONS BUS

5

## ABSTRACT OF THE DISCLOSURE

A communications bus (300) includes a number of alternate transmission paths (311, 312) between a given source node (301) and respective destination node (305) on a common substrate. The source node (301) receives a signal from a first circuit (309) serviced by the bus (300) while the respective destination node (305) transfers that signal to a second circuit (310) serviced by the bus. The communications bus (300) includes two switching arrangements for switching between the alternate transmission paths (311, 312). A source switching arrangement (318) is interposed between the source node (301) and the respective alternate transmission path (311, 312). This source switching arrangement (318) selectively connects the respective source node (301) to a selected one of the alternate transmission paths (311, 312) and disconnects the source node (301) from each other alternate transmission path. A destination switching arrangement (319) is interposed between the destination node (305) and respective alternate transmission paths (311, 312). The destination switching arrangement (319) selectively connects the respective destination node (305) to the selected alternate transmission path and disconnects the respective destination node from each other alternate transmission path.